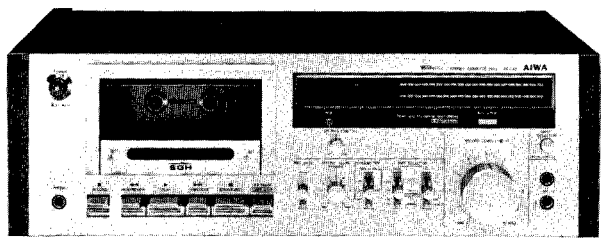
STEREO CASSETTE DECK WITH DOLBY NR SYSTEM

MODEL NO. AD-L40H,U,E,K,G

AIWA®

[SERVICE MANUAL]

Cord No. 04-400-000-51



Shown above is AD-L40U

DATE OF ISSUE 6/1979

SPECIFICATIONS

Semiconductor: 8 IC's, 45 transistors, 40 diodes
43 LED's

Power source: (H, E model)
AC 110~120V/220V/240V
switchable 50/60 Hz
(U model)
AC 120V, 60 Hz
(K, G model)
AC 120V/240V
switchable 50/60 Hz

Power consumption: 16W

Dimensions: (H, E, K, G model)
420(W) x 150(H) x 260(D) mm
(U model)
17-3/4"(W) x 5-7/8"(H) x
10-1/4"(D)
[450(W) x 150(H) x 260(D) mm]

Weight: (H, E, K, G model)
6.9 kg
(U model)
17 lbs (7.7 kg)

Track system: 4 track 2 channel stereo

Tape speed: 4.76 cm/s ± 1%
(1-7/8 ips ± 1%)

Wow & flutter: Less than 0.04%

Automatic stop system: Full auto stop

Automatic shut-off action time:
4 ± 1 s.

Pinch roller pressure: 350 ± 30 g (3.43 ± 0.3 N)

Take-up torque: 50 ± 10 g-cm (490 ± 98 mN·m)

FF & rewind torque: 125 ± 25 g-cm (1225 ± 245 mN·m)

FF & rewind time: Less than 95 s. (w/c-60 cassette)

Unattended recording acting time:
2.2 ± 0.5 s.

Playback output: 0.58 ± 0.05V (LINE, DIN)
(TTA-161)

Playback noise: Less than 1.5/1.3 mV (METAL,
(Un-Weighted) CrO_2, Fe-Cr, DOLBY NR OFF/ON)
Less than 2.0/1.5 mV (LH, DOLBY
NR OFF/ON)

Rec./Pb output: 0 VU ± 1.5 dB (LINE OUT, DIN
(400 Hz 0 VU) OUT)

Rec./Pb distortion: Less than 0.8% (METAL)
(400 Hz 0 VU) Less than 2.0% (CrO_2)
Less than 1.0% (Fe-Cr)
Less than 1.5% (LH)

Rec./Pb S/N: More than 45/48 dB (METAL, CrO_2,
(400 Hz 0 VU) Fe-Cr, DOLBY NR OFF/ON)
(Un-Weighted) More than 42/46 dB (LH, DOLBY
NR OFF/ON)

Channel separation: More than 35 dB
(1 kHz 0 VU)

Cross talk: More than 63 dB
(1 kHz 0 VU)

Erasing ratio: More than 60 dB
(METAL 125 Hz,
CrO_2, Fe-Cr, LH
400 Hz, 0 VU
+10 dB)

VU meter display error: 0 VU ± 0.5 dB
(0 VU)

Meter display error: −10 VU~0 VU ± 2 digit
0 VU~+10 VU ± 1 digit

Bias frequency: 100 kHz

Frequency response: 0 VU
METAL: 30~12,500 Hz
CrO_2: 30~8,000 Hz
−20 VU
METAL: 20~19,000 Hz
CrO_2: 20~17,000 Hz
Fe-Cr: 20~17,000 Hz
LH: 20~15,000 Hz

Motor: DC servo motor

Head: Sendust gurd head (SGH)

Recording system: AC bias

Erase system: AC erase

Input:
MIC; Max. input sensitivity 0.25 mV (200 Ω~10 kΩ suitable)
LINE IN; Max. input sensitivity 50 mV (More than 50 kΩ)
DIN; Max. input sensitivity 0.25 mV (2.7 kΩ)

Output:
LINE OUT; Standard output level 0.41V (0 VU) Optimum load impedance More than 50 kΩ
DIN; Standard output level 0.41V (0 VU) Optimum load impedance More than 470 kΩ
PHONES; 8 Ω

- Specifications and external appearance are subject to change without notice due to product improvement.
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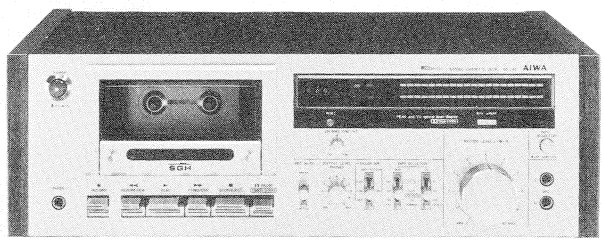
STEREO CASSETTE DECK WITH DOLBY NR SYSTEM

MODEL NO. AD-L40H,U,E,K,G

AIWA®

[SERVICE MANUAL]

Cord No. 04-400-000-51



Shown above is AD-L40U

DATE OF ISSUE 6/1979

SPECIFICATIONS

Semiconductor:	8 IC's, 45 transistors, 40 diodes 43 LED's
Power source:	(H, E model) AC 110~120V/220V/240V switchable 50/60 Hz (U model) AC 120V, 60 Hz (K, G model) AC 120V/240V switchable 50/60 Hz
Power consumption:	16W
Dimensions:	(H, E, K, G model) 420(W) x 150(H) x 260(D) mm (U model) 17-3/4"(W) x 5-7/8"(H) x 10-1/4"(D) [450(W) x 150(H) x 260(D) mm]
Weight:	(H, E, K, G model) 6.9 kg (U model) 17 lbs (7.7 kg)
Track system:	4 track 2 channel stereo
Tape speed:	4.76 cm/s ± 1% (1-7/8 ips ± 1%)
Wow & flutter:	Less than 0.04%
Automatic stop system:	Full auto stop
Automatic shut-off action time:	4 ± 1 s.
Pinch roller pressure:	350 ± 30 g (3.43 ± 0.3 N)
Take-up torque:	50 ± 10 g-cm (490 ± 98 mN·m)
FF & rewind torque:	125 ± 25 g-cm (1225 ± 245 mN·m)
FF & rewind time:	Less than 95 s. (w/c-60 cassette)
Unattended recording acting time:	2.2 ± 0.5 s.
Playback output: (TTA-161)	0.58 ± 0.05V (LINE, DIN)
Playback noise: (Un-Weighted)	Less than 1.5/1.3 mV (METAL, CrO_2, Fe-Cr, DOLBY NR OFF/ON) Less than 2.0/1.5 mV (LH, DOLBY NR OFF/ON)
Rec./Pb output: (400 Hz 0 VU)	0 VU ± 1.5 dB (LINE OUT, DIN OUT)
Rec./Pb distortion: (400 Hz 0 VU)	Less than 0.8% (METAL) Less than 2.0% (CrO_2) Less than 1.0% (Fe-Cr) Less than 1.5% (LH)
Rec./Pb S/N: (400 Hz 0 VU) (Un-Weighted)	More than 45/48 dB (METAL, CrO_2, Fe-Cr, DOLBY NR OFF/ON) More than 42/46 dB (LH, DOLBY NR OFF/ON)
Channel separation: (1 kHz 0 VU)	More than 35 dB
Cross talk: (1 kHz 0 VU)	More than 63 dB
Erasing ratio: (METAL 125 Hz, CrO_2, Fe-Cr, LH 400 Hz, 0 VU +10 dB)	More than 60 dB
VU meter display error: (0 VU)	0 VU ± 0.5 dB
Meter display error:	−10 VU~0 VU ± 2 digit 0 VU~+10 VU ± 1 digit
Bias frequency:	100 kHz
Frequency response:	0 VU METAL: 30~12,500 Hz CrO_2: 30~8,000 Hz −20 VU METAL: 20~19,000 Hz CrO_2: 20~17,000 Hz Fe-Cr: 20~17,000 Hz LH: 20~15,000 Hz
Motor:	DC servo motor
Head:	Sendust gurd head (SGH)
Recording system:	AC bias
Erase system:	AC erase
Input:	MIC; Max. input sensitivity 0.25 mV (200 Ω~10 kΩ suitable) LINE IN; Max. input sensitivity 50 mV (More than 50 kΩ) DIN; Max. input sensitivity 0.25 mV (2.7 kΩ)
Output:	LINE OUT; Standard output level 0.41V (0 VU) Optimum load impedance More than 50 kΩ DIN; Standard output level 0.41V (0 VU) Optimum load impedance More than 470 kΩ PHONES; 8 Ω

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DISASSEMBLY INSTRUCTIONS

1. To Remove Cabinet

1) Remove 6 screws.
(Refer to Fig. 1)

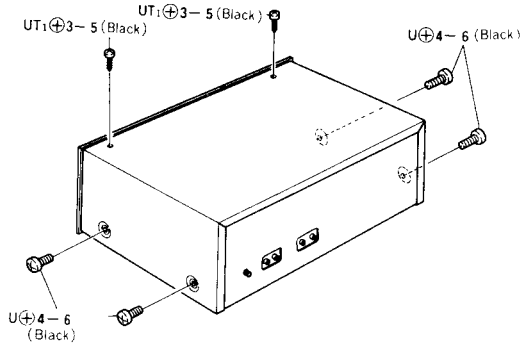


Fig. 1

2. To Remove Front Panel

1) Remove 2 screws, securing cassette lid in place.
2) Pull out the control knobs.
3) Remove 6 screws.
(Refer to Fig. 2)

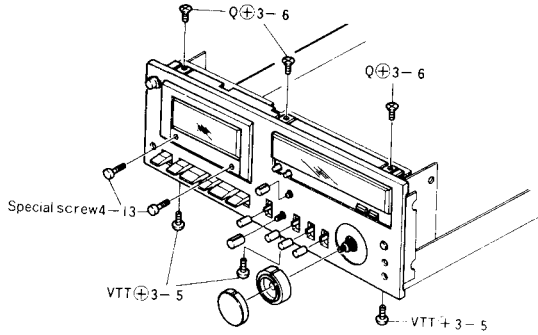


Fig. 2

3. To Remove Optical Display Circuit Board

1) Remove 4 screws.
(Refer to Fig. 3)

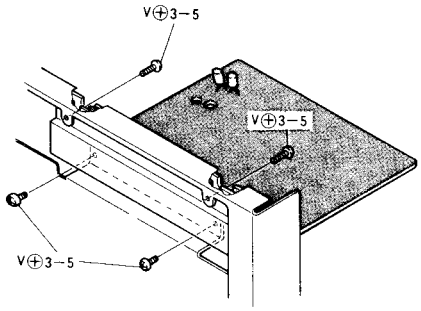


Fig. 3

4. To Remove Main Circuit Board

1) Remove the stoppers and take out the push-rods.
2) Remove the remote switch wire.
3) Remove 6 screws, 2 nuts and 4 nylon rivets.
(Refer to Fig. 4)

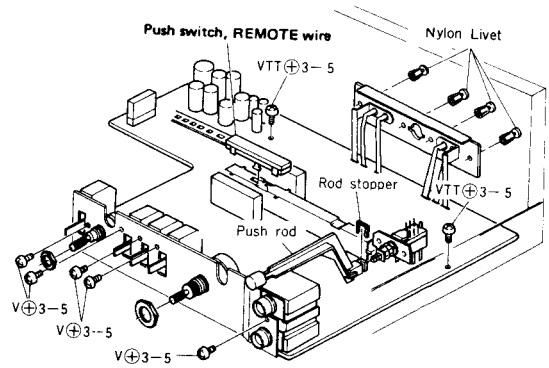


Fig. 4

5. To Remove Mechanism

1) Remove 5 screws.
(Refer to Fig. 5)

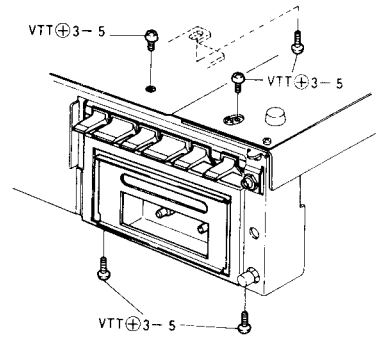
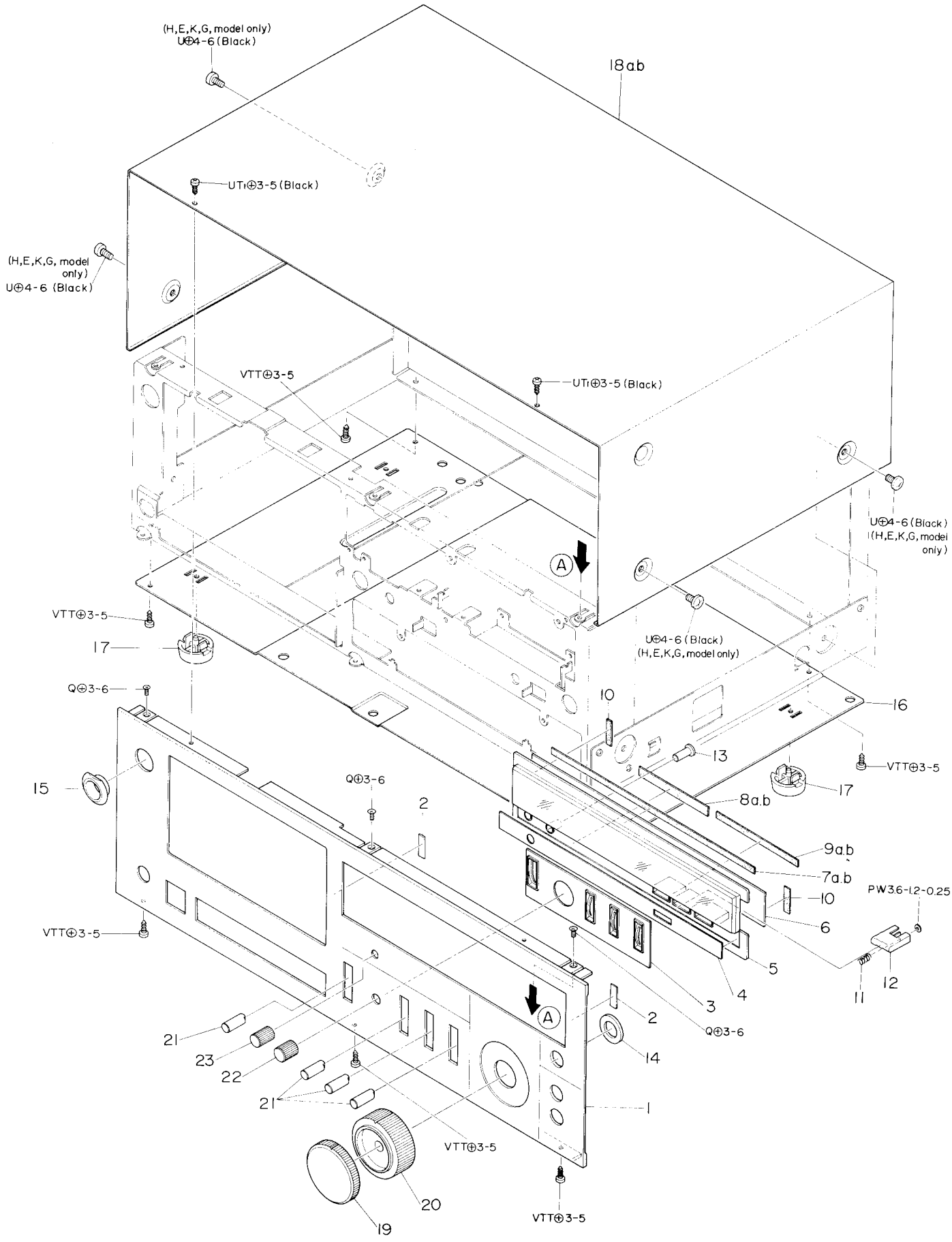


Fig. 5

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ SERVICE INFORMATION ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

EXPLODED VIEW–1



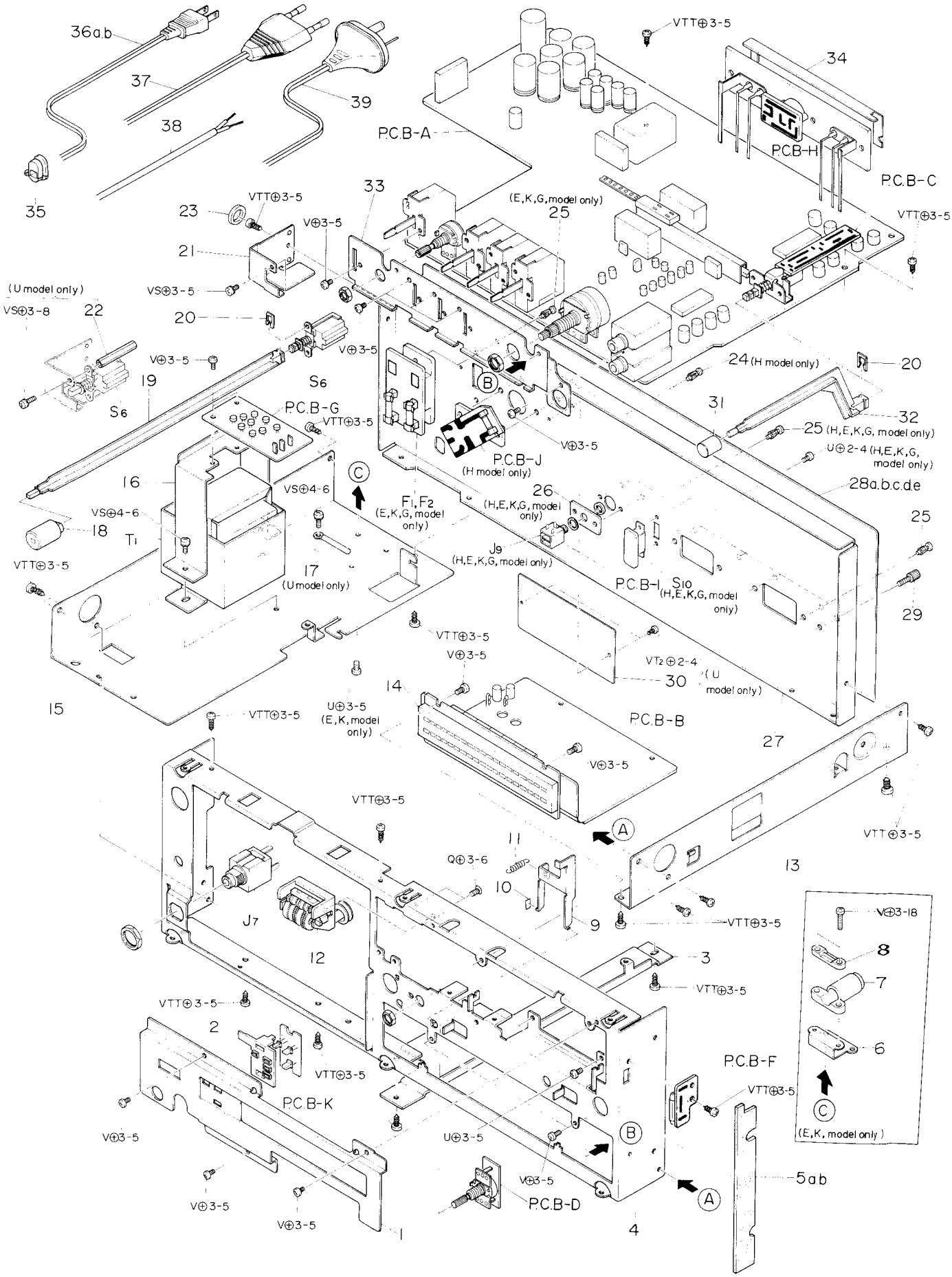
PARTS LIST

MECHANICAL PARTS

■ * mark in this part list shows exclusive part (which is used) for only Model AD-L40.

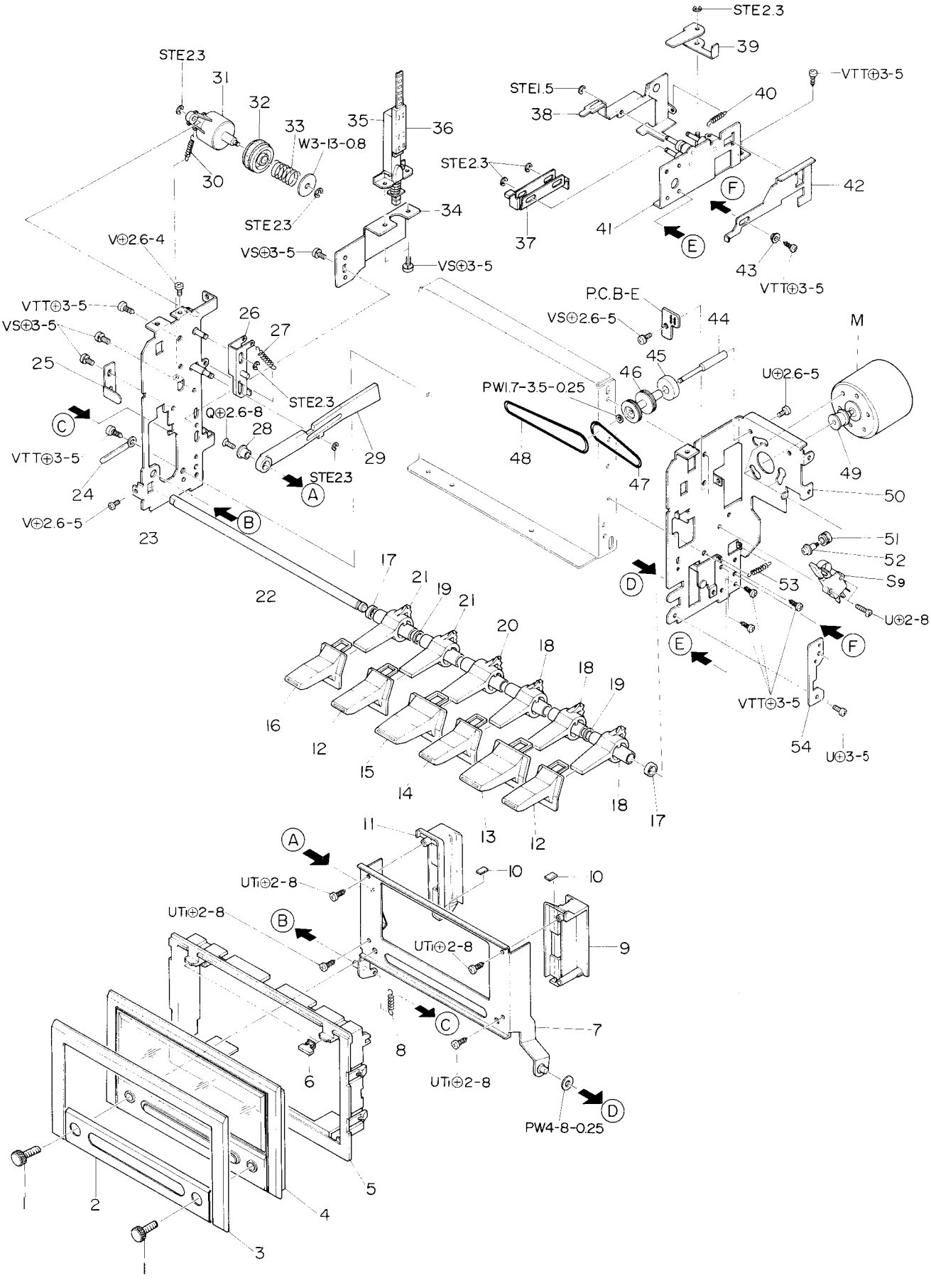
Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
1-1a	82-309-046-01		Panel, Front (H model only)	*	1	
1-1b	82-309-050-01		Panel, Front (U model only)	*	1	
1-1c	82-309-045-01		Panel, Front (E, K, G model only)	*	1	
1-2	82-309-260-01		Sheet, Adhesive	*	2	
1-3	82-309-020-01		Guide, Lever switch	*	1	
1-4	82-309-025-01		Decorative name plate, Push button	*	1	
1-5	82-309-008-01		Window, Meter	*	1	
1-6	82-309-049-01		Plate, Meter indication	*	1	
1-7a	82-309-261-01		Spacer, 6-190 (H, E, K, G model only)	*	1	
1-7b	82-309-267-01		Spacer, 6-190 (U model only)	*	1	
1-8a	82-309-262-01		Spacer, 7-74 (H, E, K, G model only)	*	1	
1-8b	82-309-268-01		Spacer, 7-74 (U model only)	*	1	
1-9a	82-309-263-01		Spacer, 4-85 (H, E, K, G model only)	*	1	
1-9b	82-309-269-01		Spacer, 4-85 (U model only)	*	1	
1-10	82-309-264-01		Spacer, 4-20	*	2	
1-11	82-309-211-01		Spring, Push button B	*	1	
1-12	82-309-014-01		Push button B	*	1	
1-13	82-309-021-01		Button, Reset	*	1	
1-14	82-309-240-01		Guide, Push button A	*	1	
1-15	82-478-012-01		Ring, Power button	AA-8700	1	
1-16	82-309-005-01		Cabinet, Bottom	*	1	
1-17	82-055-055-01		Foot		4	
1-18a	82-309-006-01		Steel cabinet (H, E, K, G model only)	*	1	
1-18b	82-322-017-01		Steel cabinet (U model only)		1	
1-19	82-309-009-01		REC knob A ass'y	*	1	
1-20	82-309-011-01		REC knob B ass'y	*	1	
1-21	82-309-019-01		Knob, lever switch	*	4	
1-22	82-309-015-01		Knob, PB	*	1	
1-23	82-309-016-01		Knob, Bias	*	1	
[U model only]						
	82-322-013-01		Side panel L ass'y (U model only)		1	
	82-322-015-01		Side panel R ass'y (U model only)		1	
	87-257-178-01		U + 4-25 (black) (U model only)		6	

EXPLODED VIEW–2



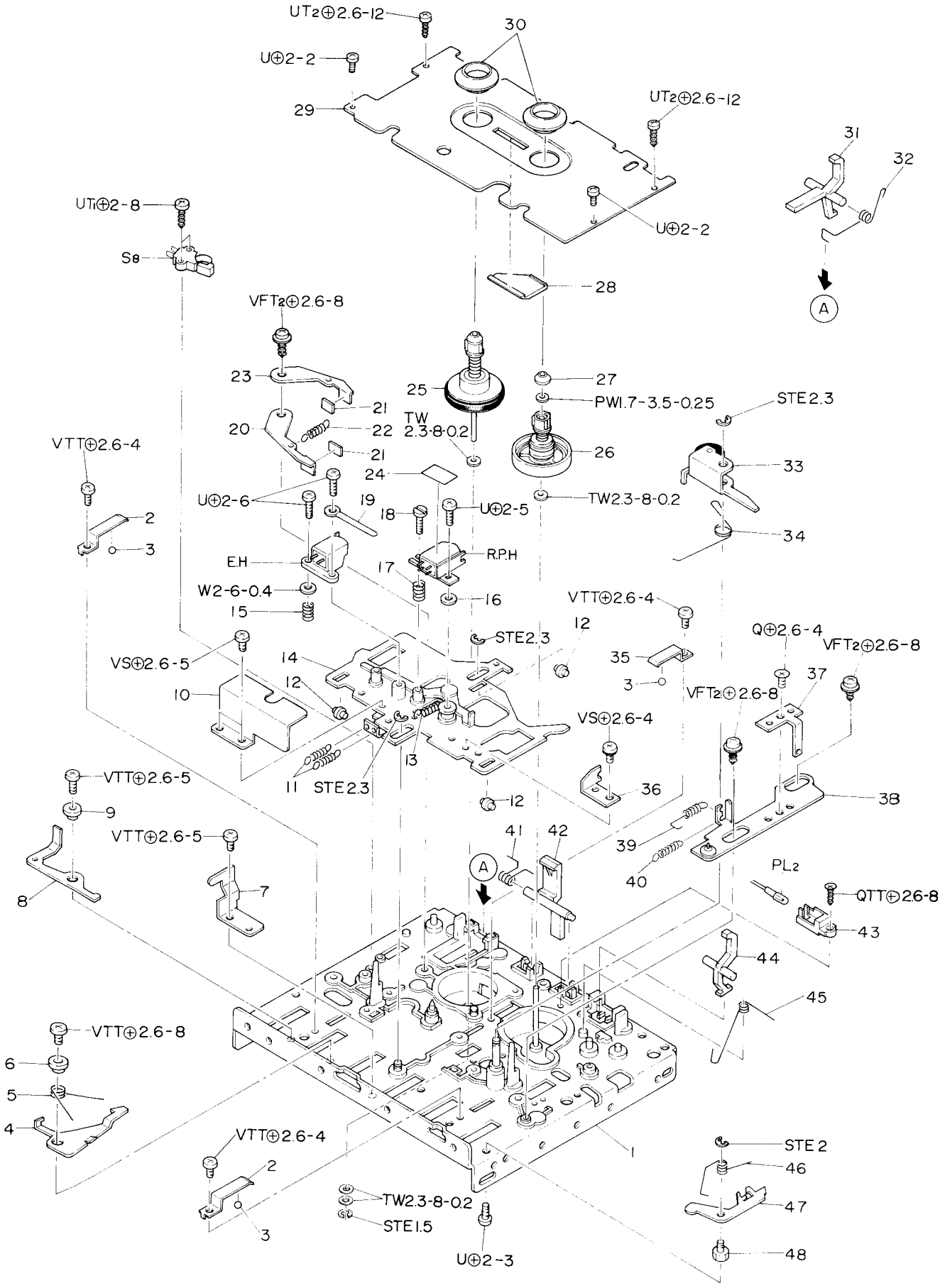
Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
2-1	82-309-037-01		Plate, Meter	*	1
2-2	82-309-255-01		Guide, LED	*	1
2-3	82-309-204-01		Amp. chassis C	*	1
2-4	82-309-201-01		Front chassis	*	1
2-5a	82-309-256-01		S cushion A (H, E, K, G model only)	*	1
2-5b	82-309-266-01		S cushion A (U model only)	*	1
2-6	82-397-244-01		Holder, AC power cord (E, K model only)	AD-6550	1
2-7	87-085-094-01		Holder, AC power cord (E, K model only)		1
2-8	87-085-095-01		Holder B, AC power cord (E, K model only)		1
2-9	82-309-252-01		Lever, Reset P	*	1
2-10	82-385-337-01		H cushion	AD-6300	1
2-11	82-309-254-01		Spring, Reset	*	1
2-12	87-040-124-01		Counter		1
2-13	82-309-203-01		Amp. chassis B	*	1
2-14	82-309-612-01		LED, Display 40	*	1
2-15	82-309-202-01		Amp. chassis A	*	1
2-16	82-326-201-01		Holder, CrO_2 circuit board		1
2-17	87-064-080-01		Wire binder (U model only)		1
2-18	82-399-025-01		Power switch button ass'y	AD-6400	1
2-19	82-385-382-01		Rod, P	AD-6300	1
2-20	82-385-383-01		Stopper, Rod	AD-6300	2
2-21	82-309-206-01		Holder, Power switch	*	1
2-22	82-309-270-01		Stopper, AC switch (U model only)	*	1
2-23	82-304-302-01		G cushion spacer		1
2-24	87-085-090-01		Nylon rivet (H model only)		2
2-25	87-085-102-01		Nylon rivet 3.5-5.5 (H, U, E, K, G model only)		H:6 U:4 E,K,G:8
2-26	82-387-273-01		Holder, Jack (H, E, K, G model only)	AD-6800	1
2-27	82-322-002-01		Panel, Rear (U model only)		1
2-28a	82-309-039-01		Jack plate (H model only)	*	1
2-28b	82-309-043-01		Jack plate (U model only)	*	1
2-28c	82-309-041-01		Jack plate (E model only)	*	1
2-28d	82-309-042-01		Jack plate (K model only)	*	1
2-28e	82-309-044-01		Jack plate (G model only)	*	1
2-29	87-033-156-01		Earth terminal		1
2-30	82-309-047-01		Name plate, Spec.	*	1
2-31	82-309-013-01		Push button A	*	1
2-32	82-309-208-01		Rod selector	*	1
2-33	82-309-205-01		Holder, Volume	*	1
2-34	82-386-629-01		Shield plate, Jack	AD-1250	1
2-35	87-085-101-01		Cord bushing		1
2-36a	87-034-826-01		AC power cord (H model only)		1
2-36b	87-034-874-01		AC power cord (U model only)		1
2-37	87-034-877-01		AC power cord (E model only)		1
2-38	87-034-872-01		AC power cord (K model only)		1
2-39	87-034-878-01		AC power cord (G model only)		1

EXPLODED VIEW–3



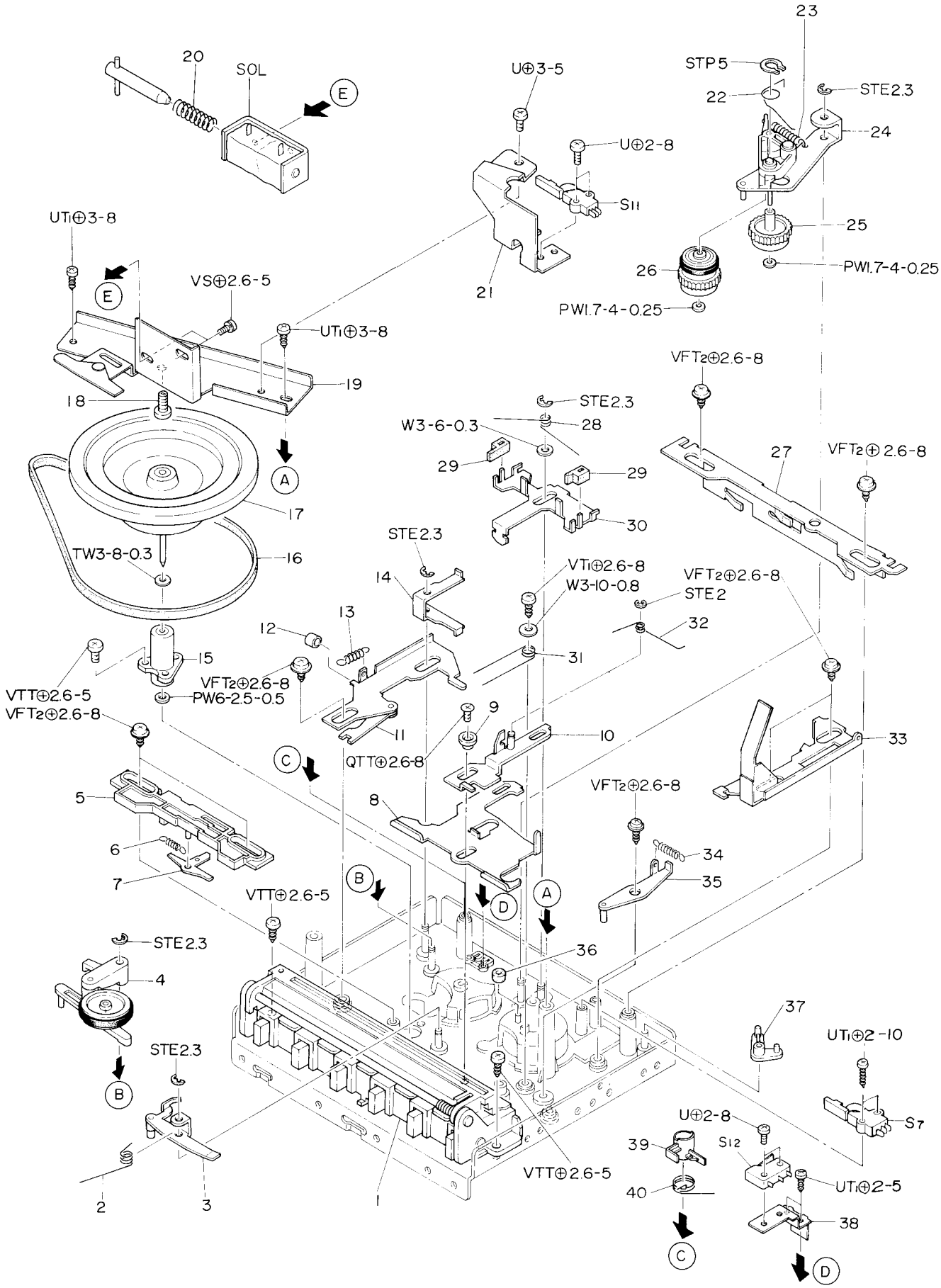
Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
3-1	82-302-049-01		Decorative screw	AD-6350	2
3-2	82-309-018-01		Panel, Cassette lid B	*	1
3-3	82-309-017-01		Panel, Cassette lid A	*	1
3-4	82-309-023-01		Cassette window ass'y	*	1
3-5	82-309-029-01		Blinder	*	1
3-6	82-399-028-01		Cushion, Lid	AD-6400	2
3-7	82-309-233-01		Cassette box ass'y	*	1
3-8	82-309-243-01		Spring, Cassette box	*	1
3-9	82-309-026-01		Cassette holder R	*	1
3-10	82-397-312-01		G cushion, Cassette	AD-6550	2
3-11	82-309-027-01		Cassette holder L	*	1
3-12	82-309-036-01		Push-key, REW	*	2
3-13	82-309-033-01		Push-key, STOP	*	1
3-14	82-309-035-01		Push-key, FF	*	1
3-15	82-309-032-01		Push-key, PLAY	*	1
3-16	82-309-034-01		Push-key, REC	*	1
3-17	82-397-279-01		Collar, Push-key	AD-6550	2
3-18	82-397-275-01		Push-key lever, STOP	AD-6550	3
3-19	87-081-574-01		Spacer, Buttom		2
3-20	82-397-274-01		Push-key lever, PLAY	AD-6550	1
3-21	82-397-276-01		Push-key lever, REW	AD-6550	2
3-22	82-309-212-01		Shaft B, Push-key	*	1
3-23	82-309-231-01		Frame chassis L ass'y	*	1
3-24	82-038-039-01		Wire binder		1
3-25	82-309-253-01		Holder, Cassette plate	*	1
3-26	82-397-261-01		Lock lever ass'y	AD-6550	1
3-27	82-397-301-01		Spring, Lock lever	AD-6550	1
3-28	82-397-281-01		Frange collar, Lid	AD-6550	1
3-29	82-397-280-01		Lock plate, Lid	AD-6550	1
3-30	82-397-303-01		Spring, Oil	AD-6550	1
3-31	82-397-265-01		Drum oil ass'y	AD-6550	1
3-32	82-397-271-01		Idler ass'y, Oil	AD-6550	1
3-33	82-397-302-01		Spring, Oil	AD-6550	1
3-34	82-309-207-01		Holder, REC switch	*	1
3-35	87-031-487-01		Control push remote switch		1
3-36	87-034-923-01		Wire, Remote switch		1
3-37	82-309-223-01		Auto slide lever	*	1
3-38	82-309-213-01		Auto detection ass'y	*	1
3-39	82-309-222-01		Lever, Kick B	*	1
3-40	82-309-248-01		Spring, Kick	*	1
3-41	82-309-217-01		Holder, Slide lever ass'y	*	1
3-42	82-309-210-01		Slide lever, PAUSE	*	1
3-43	82-309-237-01		Collar, Slide lever	*	1
3-44	82-397-247-01		Shaft, Relay ass'y	AD-6550	1
3-45	82-379-617-01		Ring magnet	AD-1800	1
3-46	82-397-228-01		Relay pulley	AD-6550	1
3-47	82-309-247-01		Belt, Counter	*	1
3-48	82-397-314-01		Rubber belt A	AD-6550	1
3-49	82-399-216-01		Motor pulley ass'y	AD-6400	1
3-50	82-309-229-01		Frame chassis R ass'y	*	1
3-51	87-087-029-01		Rubber cushion		3
3-52	87-081-483-01		Motor screw, M2.6		3
3-53	82-272-424-01		Spring, Brake		1
3-54	82-397-270-01		Shaft, Stopper C	AD-6550	1

EXPLODED VIEW–4



Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty	
4-1	82-392-379-01		Outsert chassis ass'y	AD-6550	1	
4-2	82-392-317-01		Spring, Actuating chassis B	AD-6550	2	
4-3	82-215-341-01		3/32 steel ball		3	
4-4	82-397-320-01		Stopper, Actuating chassis	AD-6550	1	
4-5	82-397-299-01		Stopper, T spring	AD-6550	1	
4-6	82-397-323-01		Collar	AD-6550	1	
4-7	82-309-209-01		Stopper, Push-key	*	1	
4-8	82-397-321-01		Lever, Actuating chassis	AD-6550	1	
4-9	82-397-322-01		Collar A, Frange	AD-6550	1	
4-10	82-397-291-01		Shield plate, Head	AD-6550	1	
4-11	82-392-342-01		Spring, Return	AD-6550	2	
4-12	82-392-318-01		Roller, Actuating chassis	AD-6550	3	
4-13	82-392-343-01		Spring, Actuating chassis	AD-6550	1	
4-14	82-481-290-01		Actuating chassis ass'y	AF-3090	1	
4-15	82-392-357-01		Spring, Erase head	AD-6550	1	
4-16	82-392-354-01		Cushion, Head	AD-6550	1	
4-17	82-392-347-01		Spring, Head	AD-6550	1	
4-18	82-439-373-01		Shaft, Head adjusting	TPR-300	1	
4-19	82-357-487-01		Holder D, Lead wire		1	
4-20	82-392-359-01		Lever, Back tension	AD-6550	1	
4-21	82-392-350-01		Felt, Back tension	AD-6550	2	
4-22	82-392-340-01		Spring, Back tension	AD-6550	1	
4-23	82-392-360-01		Lever, Back tension	AD-6550	1	
4-24	87-057-576-01		Label, Head		1	
4-25	82-399-211-01		Supply reel platform ass'y	AD-6400	1	
4-26	82-392-283-01		Take-up reel platform	AD-6550	1	
4-27	82-392-352-01		Cap, Take-up reel platform	AD-6550	1	
4-28	82-309-031-01		Guide, Light	*	1	
4-29	82-309-030-01		Cassette plate	*	1	
4-30	82-399-030-01		Ring, Reel platform	AD-6400	2	
4-31	82-397-287-01		Lever, REC blocking	AD-6550	1	
4-32	82-397-298-01		Spring, REC blocking lever	AD-6550	1	
4-33	82-392-363-01		Pinch roller ass'y	AD-6550	1	
4-34	82-392-334-01		Spring, Pinch lever	AD-6550	1	
4-35	82-392-316-01		Spring, Actuating chassis A	AD-6550	1	
4-36	82-392-367-01		Plate, P spring	AD-6550	1	
4-37	82-397-233-01		Auxiliary plate, PAUSE	AD-6550	1	
4-38	82-392-280-01		Slide plate pause ass'y	AD-6550	1	
4-39	82-392-375-01		Spring, Pause B	AD-6550	1	
4-40	82-392-374-01		Spring, Pause A	AD-6550	1	
4-41	82-397-297-01		Spring, Cassette holder	AD-6550	1	
4-42	82-397-286-01		Lever, Cassette holder	AD-6550	1	
4-43	82-309-241-01		Holder, Lamp	*	1	
4-44	82-397-288-01		Lever, CrO_2 detection	AD-6550	1	
4-45	82-392-333-01		Spring, Take-up	AD-6550	1	
4-46	82-392-335-01		Spring, Lock plate	AD-6550	1	
4-47	82-392-213-01		Lock plate	AD-6550	1	
4-48	82-392-211-01		Shaft, Lock plate	AD-6550	1	

EXPLODED VIEW–5



Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
5-1	82-392-235-01		Push switch proper ass'y	AD-6550	1
5-2	82-392-331-01		Spring, Review aux. lever	AD-6550	1
5-3	82-481-318-01		Review aux. lever C ass'y	AF-3090	1
5-4	82-392-262-01		Take-up idler ass'y	AD-6550	1
5-5	82-392-313-01		Slide plate, FR	AD-6550	1
5-6	82-392-346-01		Spring, FF	AD-6550	1
5-7	82-392-361-01		Lever, Hand operated B	AD-6550	1
5-8	82-392-323-01		Slide plate, Brake S	AD-6550	1
5-9	82-392-353-01		Collar, REW shaft	AD-6550	1
5-10	82-397-373-01		REW slide plate ass'y	AD-6550	1
5-11	82-397-253-01		Eject lever A ass'y	AD-6550	1
5-12	87-819-200-01		Vinyl tube		1
5-13	82-397-300-01		Spring, Eject lever	AD-6550	1
5-14	82-397-283-01		Eject lever B	AD-6550	1
5-15	82-392-256-01		Shaft bearing ass'y	AD-6550	1
5-16	82-392-319-01		Belt, Main	AD-6550	1
5-17	82-392-371-01		Fly wheel ass'y	AD-6550	1
5-18	82-331-107-01		Thrust for screw		1
5-19	82-309-244-01		Fly wheel plate ass'y	*	1
5-20	82-370-417-01		Spring, Plunger		1
5-21	82-397-308-01		Holder, Memory switch	AD-6550	1
5-22	82-392-330-01		Spring, FR lever	AD-6550	1
5-23	82-397-303-01		Spring	AD-6550	1
5-24	82-392-295-01		FR lever ass'y	AD-6550	1
5-25	82-392-315-01		Gear, REW	AD-6550	1
5-26	82-392-305-01		FF pulley ass'y	AD-6550	1
5-27	82-397-285-01		Slide plate, Eject	AD-6550	1
5-28	82-392-332-01		Spring, Brake	AD-6550	1
5-29	82-439-426-01		Brake shoe A	TPR-300	2
5-30	82-392-320-01		Slide plate, Brake	AD-6550	1
5-31	82-392-337-01		Spring, Center sift	AD-6550	1
5-32	82-397-375-01		Spring, REW plate	AD-6550	1
5-33	82-309-250-01		REC slide plate ass'y	*	1
5-34	82-392-345-01		Spring, REC lock	AD-6550	1
5-35	82-392-274-01		REC lock lever ass'y	AD-6550	1
5-36	82-392-373-01		G cushion, FR	AD-6550	1
5-37	82-397-284-01		Lever C, Eject	AD-6550	1
5-38	82-397-346-01		Holder, CrO_2 switch	AD-6550	1
5-39	82-397-347-01		Lever, CrO_2	AD-6550	1
5-40	82-397-350-01		Spring, CrO_2	AD-6550	1

ACCESSORIES/PACKAGE

Ref. No.	Part No.	Part No. Changed to	Description	Common Model	Q'ty
1a	82-309-854-01		Printed indiv., Packing (H, E, K, G model only)	*	1
1b	82-309-855-01		Printed indiv., Packing (U model only)	*	1
2	82-309-852-11		Cushion L, Printed indiv.	*	1
3	82-309-853-11		Cushion R, Printed indiv.	*	1
4a	87-051-131-11		Poly-vinyl sack (for AC power cord) (H model only)		1
4b	87-051-135-11		Poly-vinyl sack (for AC power cord) (U, E, K, G model only)		1
5	87-056-564-01		Curl stopper		2
6	87-056-607-01		Poly-vinyl sack (for case)		1
7a	82-309-905-01		Instructions booklet (H model only)	*	1
7b	82-309-906-01		Instructions booklet (U model only)	*	1
7c	82-309-908-01		Instructions booklet (E model only)	*	1
7d	82-309-909-01		Instructions booklet (K model only)	*	1
7e	82-309-910-01		Instructions booklet (G model only)	*	1
8	87-051-155-01		Poly-vinyl sack (for guarantee card) (U model only)		1
9	87-051-175-01		Poly-tube A		1
10	87-056-008-11		Label, AC power cord (K model only)		1
11	87-056-009-41		Distributors list (H, E, K, G model only)		1
12	87-056-016-01		Tag, Main voltage (K model only)		1
13	87-056-032-01		Guarantee card (G model only)		1
14	87-056-034-01		Service station list (U model only)		1
15	87-056-035-01		Card, Limited warranty (U model only)		1
16	87-056-036-01		Guarantee card (U model only)		1
17	87-056-042-01		Label, Metal POP		1
18	86-925-015-01		Connection cord, CW-115BSK (E model only)		1
19	86-944-012-01		Connection cord, CW-129BSK (H, U, K, G model only)		1
20	87-032-845-01		Siemens plug		1
21	87-058-023-01		Cord binder		1
22	87-058-024-01		Head cleaning pole ass'y		1

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ SERVICE INFORMATION ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

790625(1)-Z

AIWA CO.,LTD.

Printed in Japan

ELECTRICAL MAIN PARTS LIST

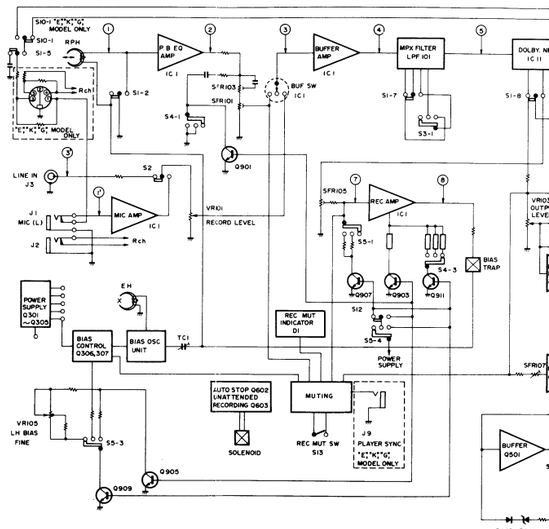
Symbol No.	Part No.	Description
≪MAIN CIRCUIT BOARD SECTION≫		
PCB-A	82-309-652-11	Main circuit board
IC11,12	87-027-357-01	IC, NE-646B
IC201	87-027-358-01	IC, TA7617AP
IC202	87-027-359-01	IC, TA7617AP-R
Q301,603	89-205-964-01	Transistor, 2SB596 (Y)
Q302	89-107-335-61	Transistor, 2SA733K (P)
Q303,306	89-309-456-01	Transistor, 2SC945L (P)
401,402		
403,404		
409,410		
411,412		
413,601		
602,604		
605,606		
607,609		
701,702		
703		
Q304	89-402-344-01	Transistor, 2SD234 (Y)
Q307,308	89-405-712-01	Transistor, 2SD571 (L)
Q405,406	89-320-014-01	Transistor, 2SC2001K (S)
407,408		
Q508	89-405-712-01	Transistor, 2SD571 (L)
D101,102	87-027-369-01	Zener diode, 05Z-6.2L
304,305		
404,405		
408		
D301,302	87-027-083-01	Diode, 1S1885
401,402		
608		
D303,306	87-027-163-01	Encapsulated diode, 1B4B1
D307	87-027-286-01	Zener diode, HZ5C1
D308,403	87-027-097-01	Diode, 1S1555
406,407		
409,410		
411,412		
602,603		
604,605		
606,607		
D309	87-027-370-01	Diode, 05Z20L
D601	88-052-188-11	Diode, 1S188 (FM)
D609	87-027-213-01	Zener diode, 05Z-100
L103,104	87-005-093-01	Micro inductor coil, 4.7mH
103,104		
L105,106	82-371-648-01	Micro inductor coil, 6.8mH
L201,202	82-304-701-01	Coil, 22mH
L901,902	87-005-091-01	Micro inductor coil, 3.3mH
TC1,2	85-708-604-21	Trimmer
OSC UNIT	82-326-602-11	Bias OSC unit
J1,2	82-309-638-01	Mic jack ass'y (MIC)
J3,4,5,6	87-309-639-01	Pin jack ass'y (LINE IN, LINE OUT) (U model only)
VR101,102	82-309-641-01	Volume, 20kΩ-A (RECORD LEVEL)
VR103,104	82-309-642-01	Volume, 10kΩ-A (OUTPUT LEVEL)
LPF101,102	82-397-634-01	Low-pass filter
S1	82-309-631-11	Slide switch (REC/PB)
S2	82-388-606-01	Push switch (INPUT SELECTOR)
S3,4,5	82-309-633-01	Lever switch (DOLBY NR, EQ, BIAS)
S13	82-309-634-01	Lever switch (REC MUTE)
SFR101,102	87-021-544-01	Semi-fixed resistor, 47kΩ-B
103,104		
105,106		
107,108		

Symbol	Part No.	Description
PIN-1,2,3	87-032-903-01	Pin, 3P
4		
PIN-6	82-481-647-01	Pin, 4P
PIN-7	87-032-910-01	Pin, 10P
		< Resistors >
R195,196	82-371-652-01	3.3kΩ ¼W ±1%
⚠ R335	87-209-107-01	3.3Ω 1/4W Fuse resistor (U model only)
⚠ R332,333	87-029-015-01	10Ω ¼W Fuse resistor
⚠ R331	87-029-106-01	47Ω ½W Fuse resistor
⚠ R625	87-029-091-01	120Ω ¼W Fuse resistor
⚠ R334	87-029-095-01	330Ω 1W Fuse resistor
		< Capacitors >
C133,134	87-014-049-01	470pF PP
C153,154	82-371-643-01	4700PF PP
C165,166	82-371-642-01	5600PF PP
C149,150	82-371-641-01	0.027μF PP
C103,104	87-015-242-01	2.2μF 50V Electrolytic LL
C119,120	87-015-246-01	4.7μF 25V Electrolytic LL
C313,314	87-015-379-01	1μF 50V Electrolytic BP
C111,112	87-015-453-01	2.2μF 25V Electrolytic BP
113,114		
129,130		
137,138		
C205,206	87-015-455-01	10μF 25V Electrolytic BP
C173,174	87-015-484-01	3.3μF 16V Electrolytic BP
203,204		
217,218		
C145,146	87-015-464-01	4.7μF 16V Electrolytic BP
147,148		
201,202		
C211,212	87-015-457-01	47μF 16V Electrolytic BP
≪OPTICAL DISPLAY CIRCUIT BOARD SECTION≫		
PCB-B	82-309-662-01	Optical display circuit board
IC591,592	87-027-350-01	IC, IR2406G
593,594		
Q501,502	89-309-456-01	Transistor, 2SC945L (P)
D501,502	87-027-097-01	Diode, 1S1555
503,504		
D505	82-309-612-11	Light emitting diode, display 40
S15	82-309-635-01	Push switch (VU/PEAK)
PIN-8,9,10,11	82-309-616-01	Pin, 4P
PIN-12,13,14	82-309-617-01	Pin, 6P
15		
PIN-16,17	82-309-618-01	Pin, 11P
≪METER LIMITER CIRCUIT BOARD SECTION≫		
PCB-C	82-309-653-11	Meter limiter circuit board
D801,802	87-027-369-01	Zener diode, 05Z-6.2L
D803,804	88-052-188-11	Diode, 1S188 (FM)
SFR801,802	87-021-567-01	Semi-fixed resistor, 10kΩ-B
≪BIAS VOLUME CIRCUIT BOARD SECTION≫		
PCB-D	82-309-654-11	Bias volume circuit board
VR105	82-321-625-01	Volume, 20kΩ-B (LH, BIAS FINE)
≪DME CIRCUIT BOARD SECTION≫		
PCB-E	82-309-655-11	DME circuit board
DME1	82-397-642-11	DM-101A
≪LAMP CIRCUIT BOARD SECTION≫		
PCB-F	82-309-656-11	Lamp circuit board
PL1	82-380-710-01	Pilot lamp, 8V 55mA

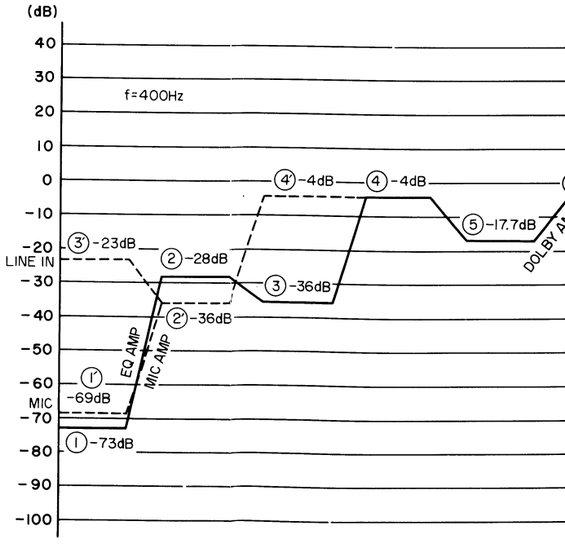
Symbol No.	Part No.	Description
≪CrO_2 AUTO CIRCUIT BOARD SECTION≫		
PCB-G	82-309-658-11	CrO_2 auto circuit board
Q901,902	89-309-456-01	Transistor, 2SC945L (P)
903,904,		
905,907,		
908,909,		
911,912		
L101,102	87-005-093-01	Micro inductor coil 4.7mH
PIN-5	87-032-903-01	Pin 3P
≪DIN JACK CIRCUIT BOARD SECTION≫ = E,K,G model		
PCB-H	82-309-659-11	DIN jack circuit board
J3,4,5,6,8	82-309-637-01	Pin jack ass'y (LINE IN, LINE OUT, DIN)
≪VOLTAGE SELECTOR CIRCUIT BOARD SECTION≫ = E,K,G model		
⚠ PCB-J	82-397-650-01	Voltage selector circuit board
⚠ S14	87-031-364-01	Slide switch (VOLTAGE SELECTOR)
⚠ F1	87-035-131-01	Fuse, "T" 100mA
	87-098-006-01	Fuse label, "T" 100mA
⚠ F2	87-035-216-01	Fuse, "T" 200mA
	87-098-009-01	Fuse label, "T" 200mA
⚠	87-032-744-01	Fuse clamp
≪LED CIRCUIT BOARD SECTION≫		
PCB-K	82-309-607-01	LED circuit board
D1	87-027-354-01	Light emitting diode, GL-9PR2 (RECORD/MUTING TIME)
D2,3	87-027-352-01	Light emitting diode GL-9NG2 (VU/PEAK)
≪MISCELLANEOUS≫		
⚠ T1	82-322-606-01	Power transformer (U model only)
⚠ T1	82-309-624-01	Power transformer (E modl only)
⚠ T1	82-309-625-01	Power transformer (K,G model only)
RPH	87-046-172-01	REC/PB head
EH	87-046-173-01	Erase head
M	87-045-114-11	Motor
⚠ CP1	87-028-036-01	Compound capacitor 0.033μF,120Ω (U model only)
SOL1	82-309-620-01	Solenoid
J7	87-032-748-01	Jack, 6.3φ (PHONES)
J9	87-032-882-01	Jack, 2.5φ (PLAYER SYNC) (E,K,G model only)
⚠ PL2	82-397-646-01	Pilot lamp, 8V 50mA
⚠	87-034-874-01	AC power cord (U model only)
⚠	87-034-877-01	AC power cord (E model only)
⚠	87-034-872-01	AC power cord (K model only)
⚠	87-034-878-01	AC power cord (G model only)
⚠	87-033-156-01	Earth terminal
⚠	87-085-101-01	Cord bushing
⚠ S6	87-031-520-01	Push switch (POWER) (U model only)
⚠ S6	87-031-408-01	Push switch (POWER) (E,K,G model only)
S7	87-031-494-01	Micro switch (MOTOR)
S8	87-031-491-01	Micro switch (PLAY)
S9,11	87-031-418-01	Micro switch (PAUSE, REVIEW)
S10	87-031-461-01	Slide switch (DIN OUTPUT)

Symbol No.	Part No.	Description
S12	87-031-377-01	Micro switch (CrO_2 AUTO)
CON-1	82-309-644-01	Connector ass'y, 3P
CON-2	82-309-648-01	Connector ass'y, 3P
CON-3	82-309-649-01	Connector ass'y, 3P
CON-4	82-309-650-01	Connector ass'y, 3P
CON-5	82-321-617-01	Connector ass'y, 3P
CON-6	82-309-646-01	Connector ass'y, 4P
CON-7	82-309-645-01	Connector ass'y, 10P

BLOCK DIAGRAM



LEVEL DIAGRAM



Symbol	Part No.	Description
PIN-1,2,3 4	87-032-903-01	Pin, 3P
PIN-6	82-481-647-01	Pin, 4P
PIN-7	87-032-910-01	Pin, 10P
		< **Resistors** >
R195,196	82-371-652-01	3.3kΩ ¼W ±1%
⚠ R335	87-209-107-01	3.3Ω 1/4W Fuse resistor (U model only)
⚠ R332,333	87-029-015-01	10Ω ¼W Fuse resistor
⚠ R331	87-029-106-01	47Ω ½W Fuse resistor
⚠ R625	87-029-091-01	120Ω ¼W Fuse resistor
⚠ R334	87-029-095-01	330Ω 1W Fuse resistor
		< **Capacitors** >
C133,134	87-014-049-01	470pF PP
C153,154	82-371-643-01	4700PF PP
C165,166	82-371-642-01	5600PF PP
C149,150	82-371-641-01	0.027μF PP
C103,104	87-015-242-01	2.2μF 50V Electrolytic LL
C119,120	87-015-246-01	4.7μF 25V Electrolytic LL
C313,314	87-015-379-01	1μF 50V Electrolytic BP
C111,112 113,114 129,130 137,138	87-015-453-01	2.2μF 25V Electrolytic BP
C205,206	87-015-455-01	10μF 25V Electrolytic BP
C173,174 203,204 217,218	87-015-484-01	3.3μF 16V Electrolytic BP
C145,146 147,148 201,202	87-015-464-01	4.7μF 16V Electrolytic BP
C211,212	87-015-457-01	47μF 16V Electrolytic BP
≪OPTICAL DISPLAY CIRCUIT BOARD SECTION≫		
PCB-B	82-309-662-01	Optical display circuit board
IC591,592 593,594	87-027-350-01	IC, IR2406G
Q501,502	89-309-456-01	Transistor, 2SC945L (P)
D501,502 503,504	87-027-097-01	Diode, 1S1555
D505	82-309-612-11	Light emitting diode, display 40
S15	82-309-635-01	Push switch (VU/PEAK)
PIN-8,9,10,11	82-309-616-01	Pin, 4P
PIN-12,13,14 15	82-309-617-01	Pin, 6P
PIN-16,17	82-309-618-01	Pin, 11P
≪METER LIMITER CIRCUIT BOARD SECTION≫		
PCB-C	82-309-653-11	Meter limiter circuit board
D801,802	87-027-369-01	Zener diode, 05Z-6.2L
D803,804	88-052-188-11	Diode, 1S188 (FM)
SFR801,802	87-021-567-01	Semi-fixed resistor, 10kΩ-B
≪BIAS VOLUME CIRCUIT BOARD SECTION≫		
PCB-D	82-309-654-11	Bias volume circuit board
VR105	82-321-625-01	Volume, 20kΩ-B (LH, BIAS FINE)
≪DME CIRCUIT BOARD SECTION≫		
PCB-E	82-309-655-11	DME circuit board
DME1	82-397-642-11	DM-101A
≪LAMP CIRCUIT BOARD SECTION≫		
PCB-F	82-309-656-11	Lamp circuit board
PL1	82-380-710-01	Pilot lamp, 8V 55mA

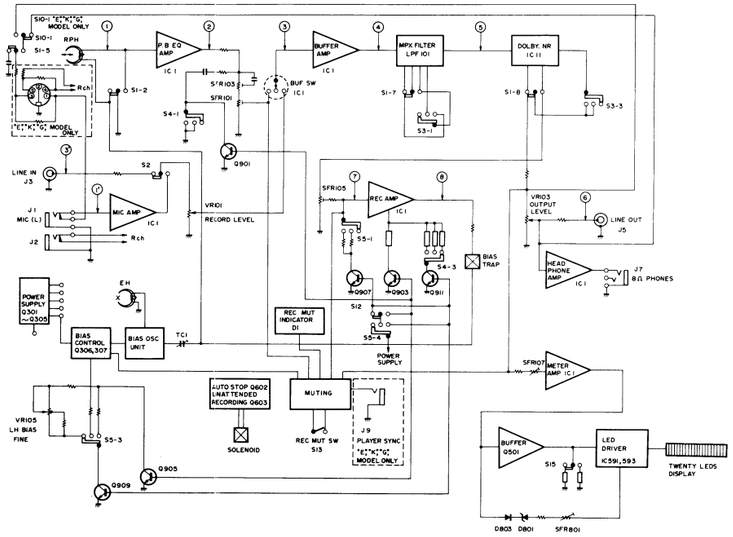
Symbol No.	Part No.	Description
≪CrO_2 AUTO CIRCUIT BOARD SECTION≫		
PCB-G	82-309-658-11	CrO_2 auto circuit board
Q901,902 903,904, 905,907, 908,909, 911,912	89-309-456-01	Transistor, 2SC945L (P)
L101,102	87-005-093-01	Micro inductor coil 4.7mH
PIN-5	87-032-903-01	Pin 3P
≪DIN JACK CIRCUIT BOARD SECTION≫ = E,K,G model		
PCB-H	82-309-659-11	DIN jack circuit board
J3,4,5,6,8	82-309-637-01	Pin jack ass'y (LINE IN, LINE OUT, DIN)
≪VOLTAGE SELECTOR CIRCUIT BOARD SECTION≫ = E,K,G model		
⚠ PCB-J	82-397-650-01	Voltage selector circuit board
⚠ S14	87-031-364-01	Slide switch (VOLTAGE SELECTOR)
⚠ F1	87-035-131-01	Fuse, "T" 100mA
	87-098-006-01	Fuse label, "T" 100mA
⚠ F2	87-035-216-01	Fuse, "T" 200mA
	87-098-009-01	Fuse label, "T" 200mA
⚠	87-032-744-01	Fuse clamp
≪LED CIRCUIT BOARD SECTION≫		
PCB-K	82-309-607-01	LED circuit board
D1	87-027-354-01	Light emitting diode, GL-9PR2 (RECORD/MUTING TIME)
D2,3	87-027-352-01	Light emitting diode GL-9NG2 (VU/PEAK)
≪MISCELLANEOUS≫		
⚠ T1	82-322-606-01	Power transformer (U model only)
⚠ T1	82-309-624-01	Power transformer (E modl only)
⚠ T1	82-309-625-01	Power transformer (K,G model only)
RPH	87-046-172-01	REC/PB head
EH	87-046-173-01	Erase head
M	87-045-114-11	Motor
⚠ CP1	87-028-036-01	Compound capacitor 0.033μF,120Ω (U model only)
SOL1	82-309-620-01	Solenoid
J7	87-032-748-01	Jack, 6.3φ (PHONES)
J9	87-032-882-01	Jack, 2.5φ (PLAYER SYNC) (E,K,G model only)
⚠ PL2	82-397-646-01	Pilot lamp, 8V 50mA
⚠	87-034-874-01	AC power cord (U model only)
⚠	87-034-877-01	AC power cord (E model only)
⚠	87-034-872-01	AC power cord (K model only)
⚠	87-034-878-01	AC power cord (G model only)
⚠	87-033-156-01	Earth terminal
⚠	87-085-101-01	Cord bushing
⚠ S6	87-031-520-01	Push switch (POWER) (U model only)
⚠ S6	87-031-408-01	Push switch (POWER) (E,K,G model only)
S7	87-031-494-01	Micro switch (MOTOR)
S8	87-031-491-01	Micro switch (PLAY)
S9,11	87-031-418-01	Micro switch (PAUSE, REVIEW)
S10	87-031-461-01	Slide switch (DIN OUTPUT)

Symbol No.	Part No.	Description
S12	87-031-377-01	Micro switch (CrO_2 AUTO)
CON-1	82-309-644-01	Connector ass'y, 3P
CON-2	82-309-648-01	Connector ass'y, 3P
CON-3	82-309-649-01	Connector ass'y, 3P
CON-4	82-309-650-01	Connector ass'y, 3P
CON-5	82-321-617-01	Connector ass'y, 3P
CON-6	82-309-646-01	Connector ass'y, 4P
CON-7	82-309-645-01	Connector ass'y, 10P

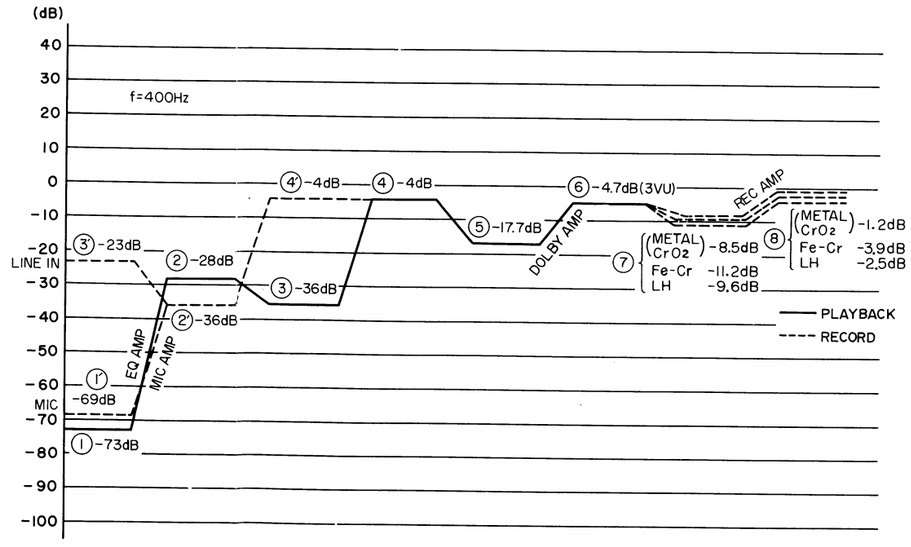
Symbol No.	Part No.	Description
		< **Capacitor** >
⚠ C1	87-015-303-01	0.047μF 250V Line (E model only)
⚠ C1,2	87-015-303-01	0.047μF 250V Line (K,G model only)

⚠ This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

BLOCK DIAGRAM

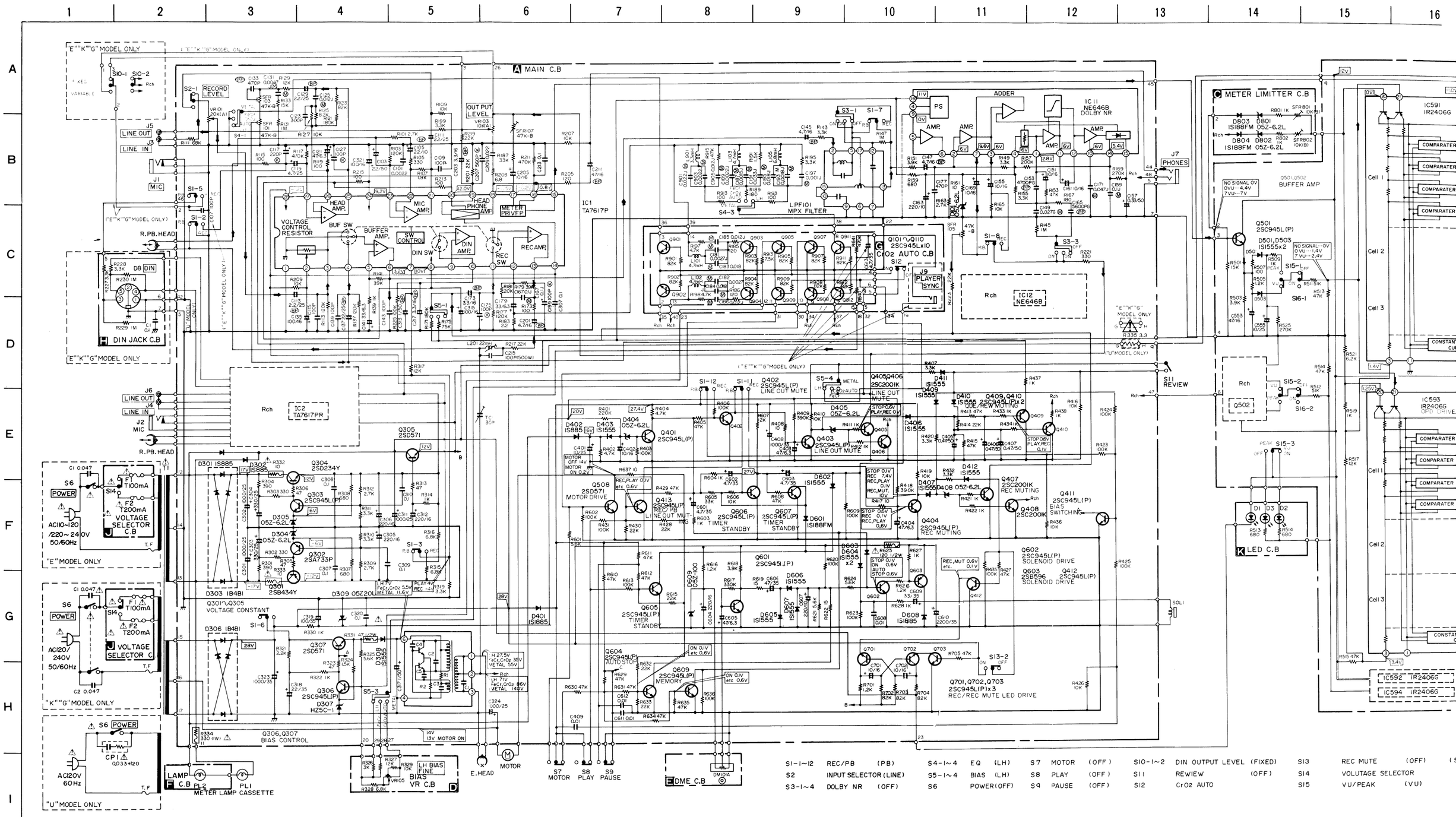


LEVEL DIAGRAM



AD-L40U,E,K,G AD-L40U,E,K,G

SCHEMATIC DIAGRAM



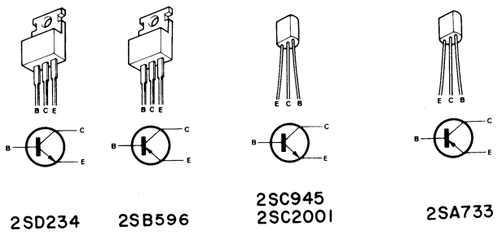
NOTES:

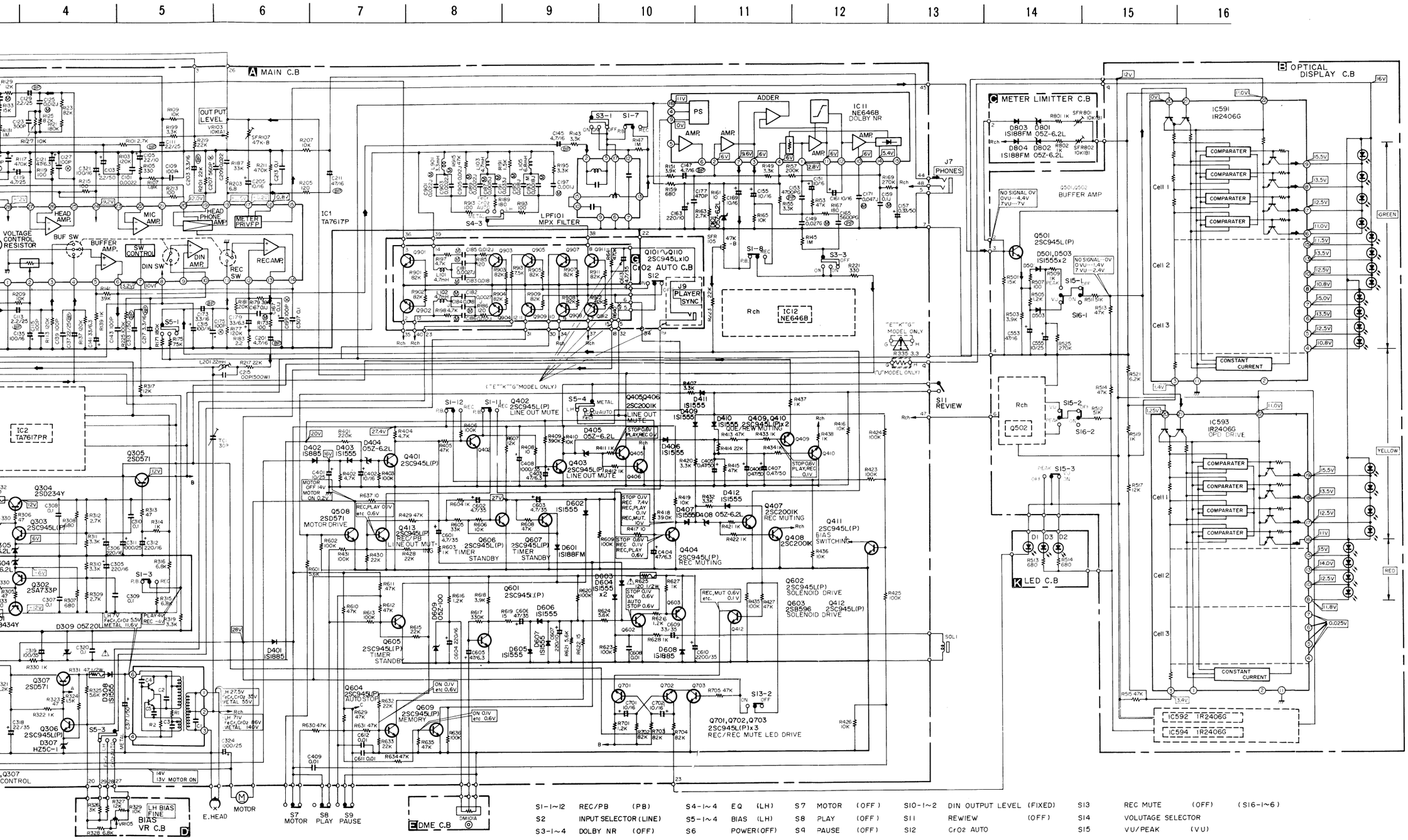
1) —— B (+) power supply ——B (−) power supply
2) ➡ Signal path
   ➡ Rec path
3) The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
   But ( ) is with AM reception or recording.
   An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.
4) Resistors with no designation have a rated power of ¼W and a tolerance of ±5%.
5) Capacitors with no designation have a dielectric strength of less than 50WV.
6) The only capacitor tolerances indicated are ±2%(G), ±5%(J) and ±10%(K).
7) Ceramic capacitor symbols:
   —||— For temperature compensation (SL)
   —|Y|— High dielectric constant system (YY)
   —||— High dielectric constant system (YW, YP, YZ)
8) Explanation of symbols
   (M) Mylar capacitor
   (PP) Polypropylene film capacitor
   (BP) Bi-polarized capacitor
   (LL) Low-leakage capacitor
   Fuse resistor

Safety component symbol

⚠ This symbol is given to important parts which serve to maintain the safety of the product, and which are made to conform to special safety specifications. Therefore, when replacing a component with this symbol, make absolutely sure that you use a designated part.

- This schematic diagram is subject to change without notice in the interests of improved performance.





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   - High dielectric constant system (YW, YP, YZ)

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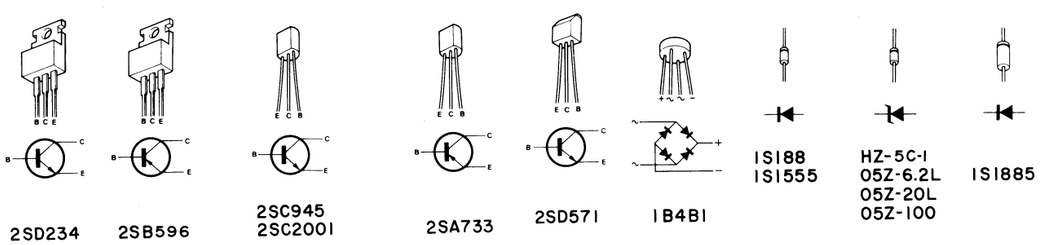


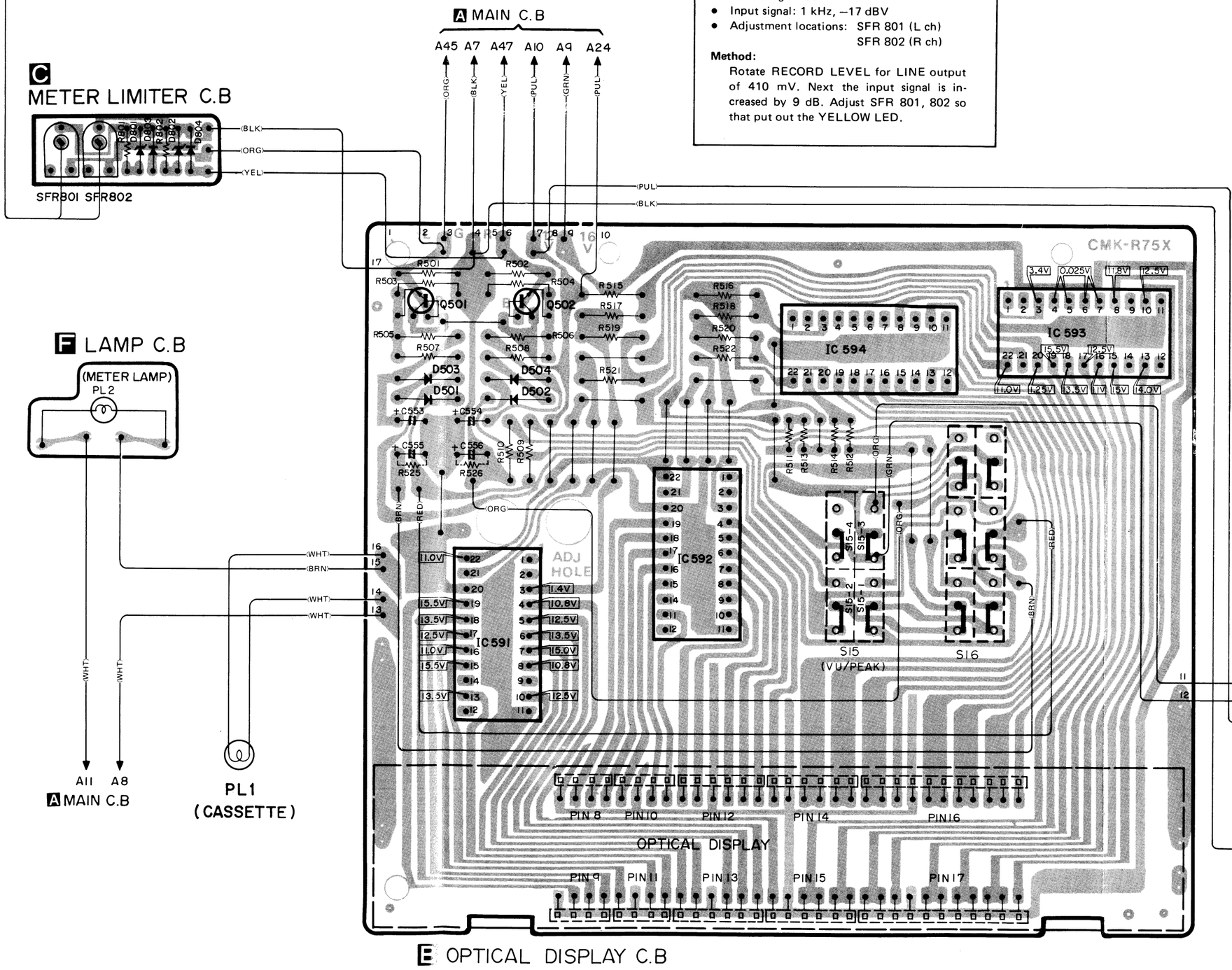
AD-L40U,E,K,G AD-L40U,E,K,G

WIRING–2

8 Peak Indicator Adjustment

Settings:
- Recording mode
- Input signal: 1 kHz, –17 dBV
- Adjustment locations: SFR 801 (L ch)
  SFR 802 (R ch)

Method:
Rotate RECORD LEVEL for LINE output of 410 mV. Next the input signal is increased by 9 dB. Adjust SFR 801, 802 so that put out the YELLOW LED.



NOTES (1) B(+) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.

4 5 6 7 8 9 10 11 12 13 14 15 16

8 Peak Indicator Adjustment

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- Recording mode
- Input signal: 1 kHz, –17 dBV
- Adjustment locations: SFR 801 (L ch)
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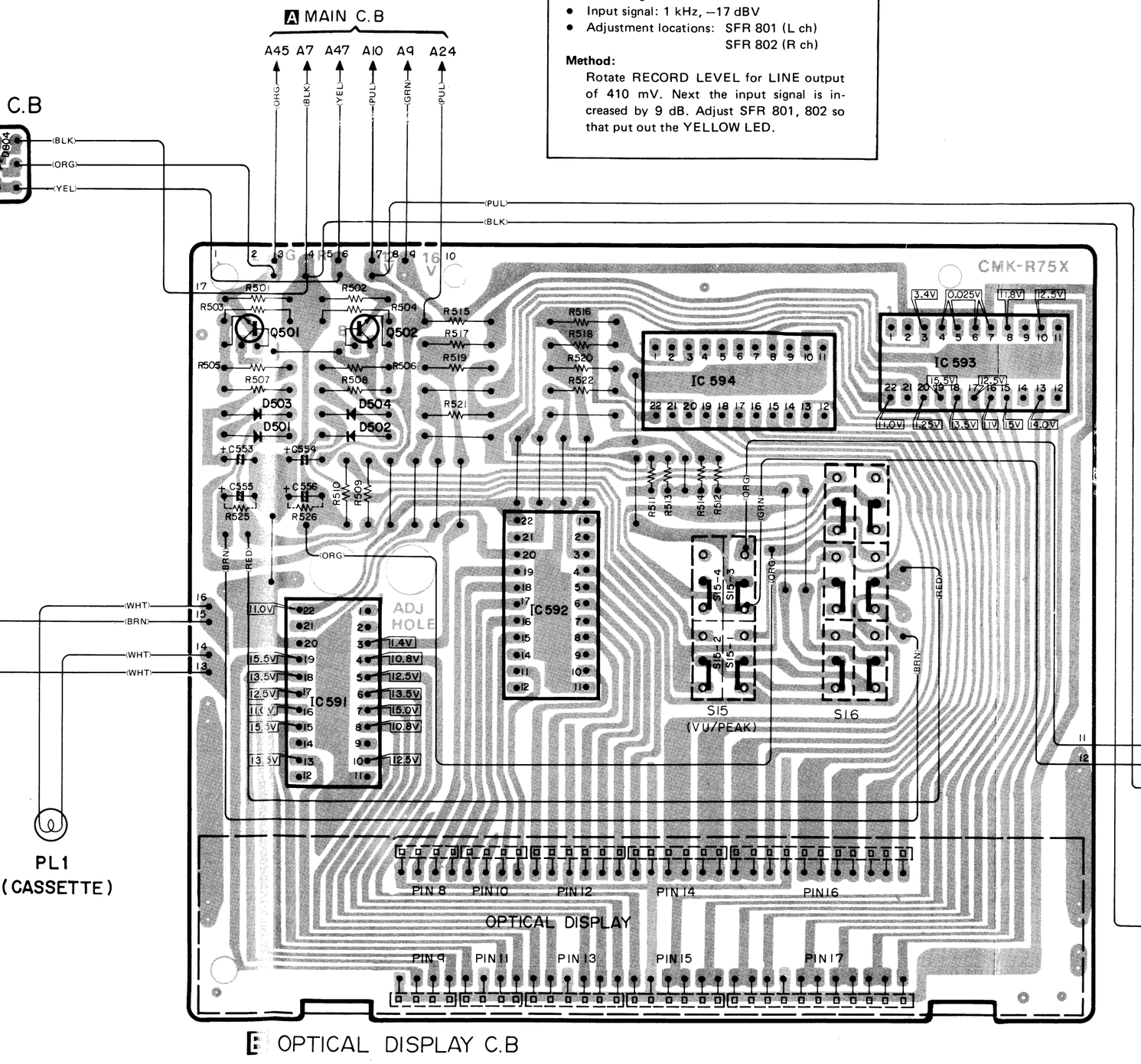
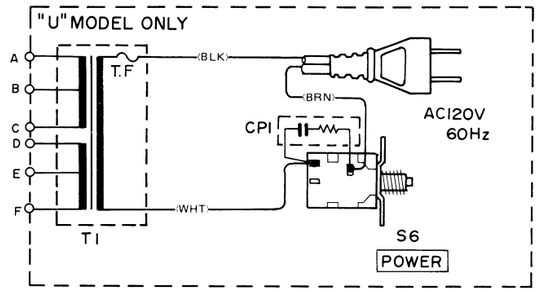
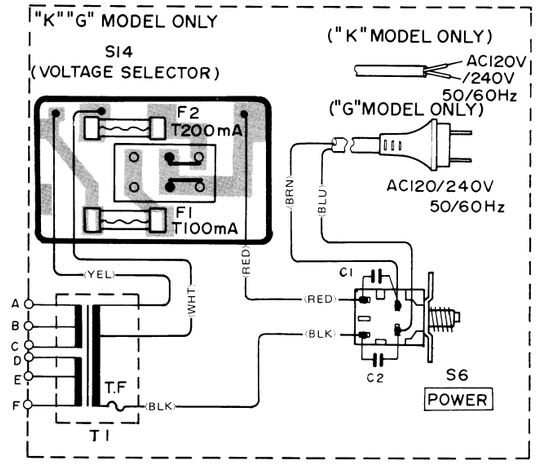
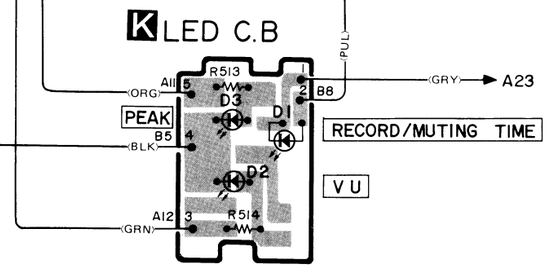


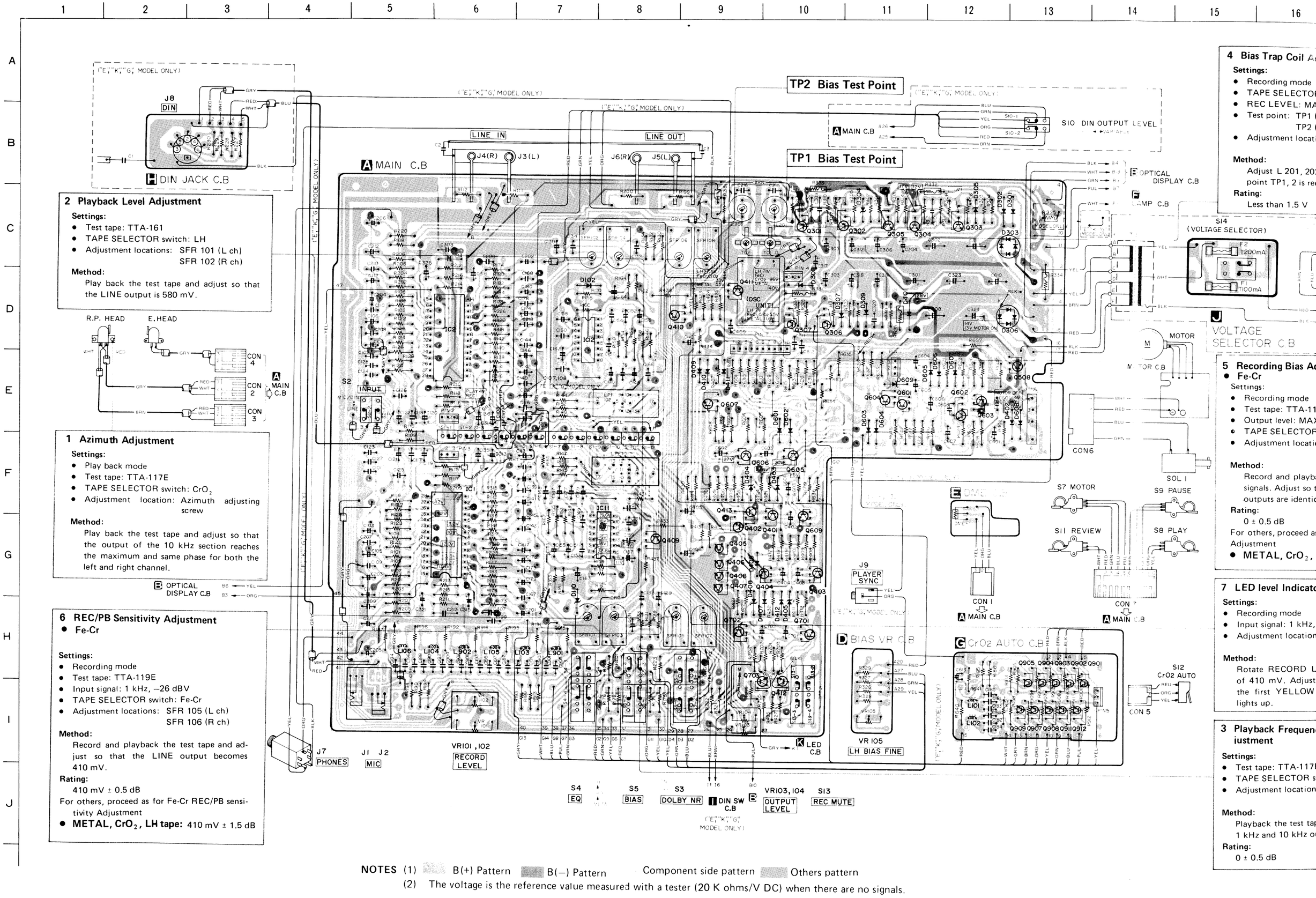






NOTES (1) B(+) Pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.



1 Azimuth Adjustment

Settings:

- Play back mode
- Test tape: TTA-117E
- TAPE SELECTOR switch: CrO_2
- Adjustment location: Azimuth adjusting screw

Method:

Play back the test tape and adjust so that the output of the 10 kHz section reaches the maximum and same phase for both the left and right channel.

2 Playback Level Adjustment

Settings:

- Test tape: TTA-161
- TAPE SELECTOR switch: LH
- Adjustment locations: SFR 101 (L ch)
  SFR 102 (R ch)

Method:

Play back the test tape and adjust so that the LINE output is 580 mV.

6 REC/PB Sensitivity Adjustment

- **Fe-Cr**

Settings:

- Recording mode
- Test tape: TTA-119E
- Input signal: 1 kHz, –26 dBV
- TAPE SELECTOR switch: Fe-Cr
- Adjustment locations: SFR 105 (L ch)
  SFR 106 (R ch)

Method:

Record and playback the test tape and adjust so that the LINE output becomes 410 mV.

Rating:

410 mV ± 0.5 dB

For others, proceed as for Fe-Cr REC/PB sensitivity Adjustment

- **METAL, CrO_2, LH tape:** 410 mV ± 1.5 dB

4 Bias Trap Coil A

Settings:

- Recording mode
- TAPE SELECTOR
- REC LEVEL: MA
- Test point: TP1 (
  TP2 (
- Adjustment locati

Method:

Adjust L 201, 20
point TP1, 2 is re

Rating:

Less than 1.5 V

5 Recording Bias Ad

- **Fe-Cr**

Settings:

- Recording mode
- Test tape: TTA-11
- Output level: MAX
- TAPE SELECTOR
- Adjustment locati

Method:

Record and playba
signals. Adjust so t
outputs are identic

Rating:

0 ± 0.5 dB

For others, proceed as
Adjustment

- **METAL, CrO_2,**

7 LED level Indicato

Settings:

- Recording mode
- Input signal: 1 kHz,
- Adjustment location

Method:

Rotate RECORD L
of 410 mV. Adjust
the first YELLOW
lights up.

3 Playback Frequen iustment

Settings:

- Test tape: TTA-117
- TAPE SELECTOR s
- Adjustment location

Method:

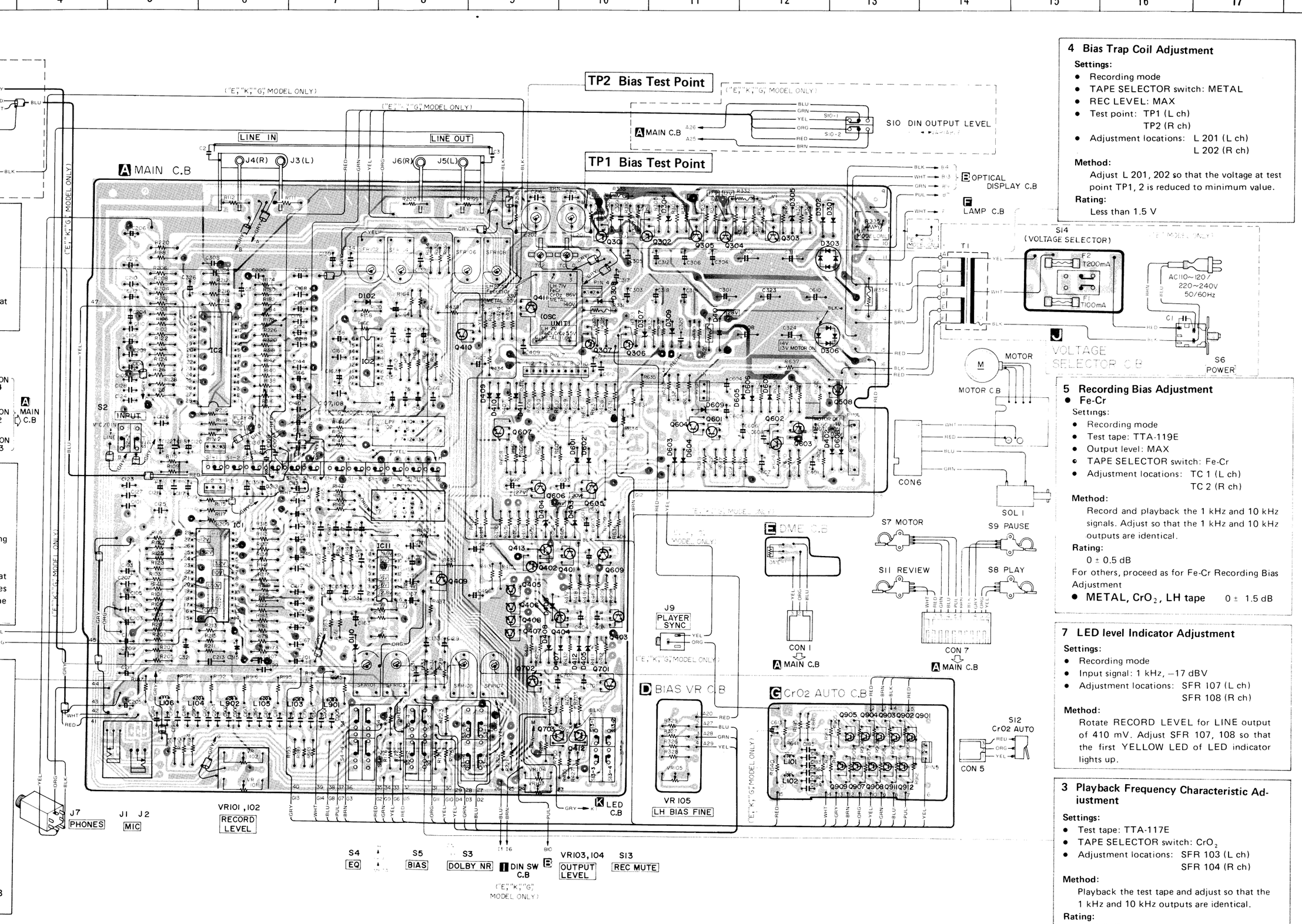
Playback the test tap
1 kHz and 10 kHz o

Rating:

0 ± 0.5 dB

NOTES (1) B(+) Pattern B(–) Pattern Component side pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.



4 Bias Trap Coil Adjustment

Settings:

- Recording mode
- TAPE SELECTOR switch: METAL
- REC LEVEL: MAX
- Test point: TP1 (L ch)
  TP2 (R ch)
- Adjustment locations: L 201 (L ch)
  L 202 (R ch)

Method:

Adjust L 201, 202 so that the voltage at test point TP1, 2 is reduced to minimum value.

Rating:

Less than 1.5 V

5 Recording Bias Adjustment

- **Fe-Cr**

Settings:

- Recording mode
- Test tape: TTA-119E
- Output level: MAX
- TAPE SELECTOR switch: Fe-Cr
- Adjustment locations: TC 1 (L ch)
  TC 2 (R ch)

Method:

Record and playback the 1 kHz and 10 kHz signals. Adjust so that the 1 kHz and 10 kHz outputs are identical.

Rating:

0 ± 0.5 dB

For others, proceed as for Fe-Cr Recording Bias Adjustment

- **METAL, CrO_2, LH tape** 0 ± 1.5 dB

7 LED level Indicator Adjustment

Settings:

- Recording mode
- Input signal: 1 kHz, −17 dBV
- Adjustment locations: SFR 107 (L ch)
  SFR 108 (R ch)

Method:

Rotate RECORD LEVEL for LINE output of 410 mV. Adjust SFR 107, 108 so that the first YELLOW LED of LED indicator lights up.

3 Playback Frequency Characteristic Adjustment

Settings:

- Test tape: TTA-117E
- TAPE SELECTOR switch: CrO_2
- Adjustment locations: SFR 103 (L ch)
  SFR 104 (R ch)

Method:

Playback the test tape and adjust so that the 1 kHz and 10 kHz outputs are identical.

Rating:

0 ± 0.5 dB

NOTES (1) B(+) Pattern B(−) Pattern Component side pattern Others pattern

(2) The voltage is the reference value measured with a tester (20 K ohms/V DC) when there are no signals.